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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/552,732  | 10/11/2005  | Norimitsu Kai        | 001560-573          | 9455             |
| 21839 7590 06/16/2008<br>BUCHANAN, INGERSOLL & ROONEY PC<br>POST OFFICE BOX 1404<br>ALEXANDRIA, VA 22313-1404 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| ROST, ANDREW J  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 3753  |             |                      |                     |                  |
| NOTIFICATION DATE   |             | DELIVERY MODE        |                     |                  |
| 06/16/2008  |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

## Application No.

10/552,732

## Applicant(s)

KAI ET AL.

## Examiner

Andrew J. Rost

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3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date 10/11/2005, 1/12/2006

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi Organic Chemicals Industry Co., Ltd. (JP 3052091 U).

Regarding claim 1, Asahi Organic Chemicals Industry Co., Ltd. (herein "Asahi") discloses a valve assembly having a valve housing (2) with a substantially cylindrical flow passage (fig. 1), an operating unit (1) for rotating a valve stem (10) of a valve member wherein the operating unit is mounted on a top flange (8) by a plurality of pins (3) that are connected to the top flange through a plurality of cutouts (13) extending from the outer peripheral edge of the top flange toward the center thereof so that the

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pins (3) can be moved in a radial direction of the top flange. Asahi does not expressly disclose the valve structure associated with a butterfly valve. However, Asahi discloses the use of either a ball valve (disclosed throughout the description) or a butterfly valve to be suitable for valve operation (paragraph 0009). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the butterfly valve of Asahi with a disc-shaped member as is well known in butterfly valves.

In regards to claim 7, Asahi discloses the operating unit to be an automatic operating unit (1, with the term automatic taken to mean operated by means other than a user's hand rotating a handle).

4. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi Organic Chemicals Industry Co., Ltd. (JP 3052091 U) in view of Raymond, Jr. (US 5,152,501 A).

Regarding claim 1, Asahi Organic Chemicals Industry Co., Ltd. (herein "Asahi") discloses a valve assembly having a valve housing (2) with a substantially cylindrical flow passage (fig. 1), an operating unit (1) for rotating a valve stem (10) of a valve member wherein the operating unit is mounted on a top flange (8) by a plurality of pins (3) that are connected to the top flange through a plurality of cutouts (13) extending from the outer peripheral edge of the top flange toward the center thereof so that the pins (3) can be moved in a radial direction of the top flange. Asahi does not expressly disclose the valve structure associated with a butterfly valve (although Asahi discloses

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the use with a butterfly valve in paragraph 0009). However, Raymond, Jr. teach a butterfly valve having a disc-shaped valve element (27) arranged within a flow passage and being rotated along with a rotatable stem (28) in order to control the flow of fluid through a passageway by utilizing a butterfly valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the valve assembly of Asahi as a butterfly valve having a disc-shaped valve element as taught by Raymond, Jr. in order to control the flow of fluid through a passageway by utilizing a butterfly valve.

In regards to claim 2, Raymond, Jr. teaches an annular seat ring (21) extending in a circumferential direction of the flow passage and fitted between the inner peripheral surface of the flow passage and the outer peripheral edge of the valve element wherein the stem extends through the annular seat ring in order to provide improved sealing of the valve assembly with the outer periphery of the disc (27) positioned to fit tightly within the inner wall of the seat (col. 3, lines 45-49).

In regards to claims 3 and 4, Raymond, Jr. teaches a groove (43) for a spacer (42) is provided on a top surface of the flange in order to hold C-rings (40) and stem within the bore (col. 4, lines 36-40).

In regards to claim 7, Asahi discloses the operating unit to be an automatic operating unit (1, with the term automatic taken to mean operated by means other than a user's hand rotating a handle).

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5. Claims 1, and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi Organic Chemicals Industry Co., Ltd. (JP 3052091 U) in view of James et al. (US 4,815,693 A)

Regarding claim 1, Asahi Organic Chemicals Industry Co., Ltd. (herein "Asahi") discloses a valve assembly having a valve housing (2) with a substantially cylindrical flow passage (fig. 1), an operating unit (1) for rotating a valve stem (10) of a valve member wherein the operating unit is mounted on a top flange (8) by a plurality of pins (3) that are connected to the top flange through a plurality of cutouts (13) extending from the outer peripheral edge of the top flange toward the center thereof so that the pins (3) can be moved in a radial direction of the top flange. Asahi does not expressly disclose the valve structure associated with a butterfly valve (although Asahi discloses the use with a butterfly valve in paragraph 0009). However, James et al. teach a butterfly valve assembly having a disc-shaped valve element (24) arranged within a flow passage and being rotated along with a rotatable stem (28) in order to control the flow of fluid through a passageway by utilizing a butterfly valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the valve assembly of Asahi as a butterfly valve having a disc-shaped valve element as taught by James et al. in order to control the flow of fluid through a passageway by utilizing a butterfly valve.

In regards to claims 5 and 6, James et al. teach the operating unit to be a manual operating unit mounted on the top flange and comprises a lever (38) that is rotated and interacts with a gear (notch plate 18) in order to provide a manual means (hand

operated) for a user to rotate the valve stem and valve member to vary the operating state of the valve (col. 3, lines 60-65).

In regards to claim 7, Asahi discloses the operating unit to be an automatic operating unit (1, with the term automatic taken to mean operated by means other than a user's hand rotating a handle).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haddad, Jr. discloses a butterfly valve assembly being rotated by a manual operating unit and the valve assembly being lined by an annular valve seal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew J. Rost whose telephone number is 571-272-2711. The examiner can normally be reached on 7:00 - 4:30 M-Th and 7:00 - 12:00 Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. J. R./  
Examiner, Art Unit 3753  
June 9, 2008

/Stephen M. Hepperle/  
Primary Examiner, Art Unit 3753